File Structure for ReMeltRadar Project Repository

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Description

Outline of file structure for ReMeltRadar project repository to store data, documentation and processing scripts.

Change Log

Date	Version	Comment
2022-01-25	0.1	Document created.

1 File Structure

There are **two key file structures** within the project: the first is a top-level file structure which discriminates between raw data, processed data and associated scripts and documentation. The second is a sub-folder hierarchy which can be found within the top-level folders. Top-level folders which do not contain the sub-folder hierarchy are denoted with an asterisk (∗) in the figure below.

1.1 Top-Level Folder Structure

The purpose of each folder within the top-level folder structure described in turn.

```
/ReMeltRadar

├── Doc

├── QGis*

├── Untouched

├── Raw

├── Proc

├── Src

└── Log*
```
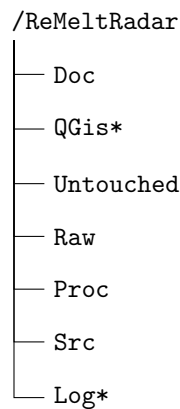
Figure 1: Top-level folder structure for ReMeltRadar project repository.

Doc contains textual, imagery (i.e. scanned document or photography) or other documentation that describes how the data in **Raw** was collected and how it is processed by scripts in **Src** to generate the output data in **Proc**.

QGis contains the QGis project and associated shapefiles and imagery that were used for the ReMeltRadar traverse.

Untouched contains unprocessed data that has not been modified since export from the instrument. It serves as a backup of original data and **should not be renamed, processed or otherwise modified**.

Raw contains unprocessed data that has been modified since originally downloaded. This could include renaming of the files so that they are consistent, for example.

Proc contains processed data that has been modified and processed using either a script located in **Src** or otherwise. The processing procedure should be documented in **Doc** and the processed data should include reference to the date on which they were generated.

Src contains scripts for processing the raw data located in **Raw** to generate the processed data destined for **Proc**. Scripts **should not modified data in Raw** and instead modifications should be made in-place within **Proc** if required.

Log is used to store log files and reports generated by scripts in **Src** and through data cataloguing operations.

1.2   Sub-Folder Structure

The second file-structure can be found within most of the top-level folders and sorts data, processing scripts and documentation into a hierarchical structure.

```
/
├── ApRES
│   ├── Rover
│   │   ├── HF
│   │   └── VHF
│   └── SPM
│       ├── SPM_A
│       ├── SPM_X
│       ├── SPM_X2
│       ├── SPM_X3
│       └── SPM_X4
├── CApRES
├── PulseEKKO
├── RTKGPS
└── VNA
    ├── CableLength
    └── HFAntenna
```
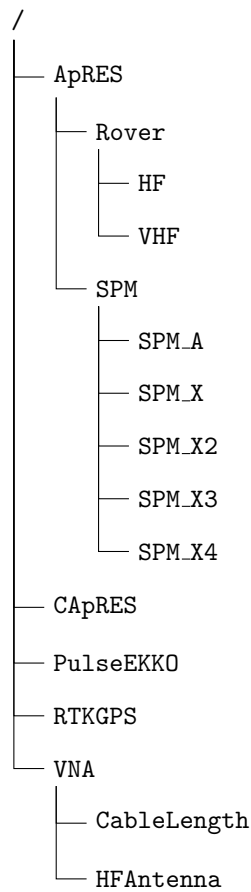
Figure 2: Overview of sub-folder file structure for hierarchical separation of data, documentation and processing scripts.